THE UNITED STATES PATENT AND TRADEMARK OFFICE In re Patent Application of Atty Dkt. 2365-40 C# М# **ROLLAT-CORVOL** Group Art Unit: 1615 Serial No. 10/069,220 Examiner: Channavajjala, L. Date: December 10, 2003 Filed: February 22, 2002 COSMETIC COMPOSITION BASED ON PARTIALLY NEUTRALIZED WATER-Title: SOLUBLE UNPOLYMERIZED OR RELATIVELY UNPOLYMERIZED **ORGANOSILICON COMPOUNDS** Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450 Sir: RESPONSE/AMENDMENT/LETTER This is a response/amendment/letter in the above-identified application and includes an attachment which is hereby incorporated by reference and the signature below serves as the signature to the attachment in the absence of any other signature thereon. □ Correspondence Address Indication Form Attached. Fees are attached as calculated below: Total effective claims after amendment 0 minus highest number \$ 0.00 (at least 20) = \$ 18.00 previously paid for 20 X minus highest number Independent claims after amendment \$ 0.00 \$ 86.00 previously paid for Х (at least 3) =If proper multiple dependent claims now added for first time, add \$290.00 (ignore improper) \$ 0.00 Petition is hereby made to extend the current due date so as to cover the filing date of this 0.00 paper and attachment(s) (\$110.00/1 month; \$420.00/2 months; \$950.00/3 months) \$ \$ 0.00 Terminal disclaimer enclosed, add \$ 110.00 \$ 0.00 First/second submission after Final Rejection pursuant to 37 CFR 1.129(a) (\$770.00) Please enter the previously unentered , filed Submission attached 0.00 Subtotal 0.00 If "small entity," then enter half (1/2) of subtotal and subtract -\$ Applicant claims "small entity" status. 

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The Commissioner is hereby authorized to charge any <u>deficiency</u>, or credit any overpayment, in the fee(s) filed, or asserted to be filed, or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Account No. 14-1140. A duplicate copy of this sheet is attached.

irm) to our Account No. 14-1140. A <u>duplicate</u> copy of this sheet is attached

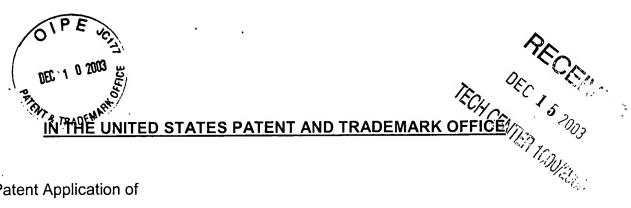
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By Atty: B. J. Sadoff, Reg. No. 36,663

Signature:



In re Patent Application of

ROLLAT-CORVOL

Atty. Ref.: 2365-40; Confirmation No. 1821

Appl. No. 10/069,220

Group: 1615

Filed: February 22, 2002

Examiner: Channavajjala, L.

For: COSMETIC COMPOSITION BASED ON PARTIALLY NEUTRALIZED WATER-

SOLUBLE UNPOLYMERIZED OR RELATIVELY UNPOLYMERIZED

ORGANOSILICON COMPOUNDS

December 10, 2003

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

## RESPONSE

Responsive to the Official Action dated September 10, 2003, consideration of the following remarks are requested.

Claims 1-9 are pending.

The Section 112, second paragraph, rejection of claims 1-9 is traversed. Consideration of the following and withdrawal of the Section 112, second paragraph, rejection are requested.

The applicants respectfully submit that the expression "relatively unpolymerized" of the claims is definite.

Specifically, in claim 1, the cosmetic composition contains at least 0.05% by weight, relative to the total weight of the composition, of one or more unpolymerized or ROLLAT-CORVOL Appl. No. 10/069,220 December 10, 2003

relatively unpolymerized water-soluble organosilicon compounds chosen from organosilanes comprising a silicon atom and organosiloxanes comprising two or three silicon atoms.

This definition will be recognized by one of ordinary skill in the art to mean that <u>unpolymerized</u> water-soluble organosilicon compounds are chosen from organosilanes comprising a silicon atom and <u>relatively unpolymerized</u> water-soluble organosilicon compounds are chosen from organosiloxanes comprising <u>two or three silicon atoms</u>.

The applicants submit that the term "relatively unpolymerized" is definite, because the number of monomers is explicitly recited in the claim 1 and in the specification on page 4, lines 30-33 and on page 5, lines 13-16.

Withdrawal of the Section 112, second paragraph, rejection of claims 1-9 is requested.

The Section 103 rejection of claims 1-9 over U.S. Patent No. 4,344,763 ('763) in view of EP 464835 (EP 835) or EP 159628 (EP 628) in view of EP 835, is traversed.

Reconsideration and withdrawal of the rejection are requested in view of the following distinguishing comments.

The Examiner is understood to believe that it would have been obvious to one of ordinary skill in the art at the time of the present invention to incorporate a suitable protonic acid, such as the sulfuric acid disclosed in EP 835 in the hair setting compositions of US '763 or in the hair-strengthening compositions of EP 628.

The technical problem solved by the present invention is to obtain a stablecosmetic composition, in particular for treating the hair, which is essentially aqueous and which makes it possible to obtain a sufficient and remaining cosmetic effect in rinse-out or leave-in mode.

The present application is directed to a cosmetic composition comprising, in a cosmetically acceptable aqueous medium, at least 0.05%, relative to the total weight of the composition of one or more unpolymerized or relatively unpolymerized water-soluble organosilicon compounds chosen from organosilanes comprising a silicon atom and organosiloxanes comprising two or three silicon atoms, these organosilicon compounds also comprising at least one basic chemical function and at least two hydrolysable or hydroxyl groups per molecule, said composition being characterized in that it comprises an amount of a neutralizing agent chosen form sulfuric acid, sulfuric acid salts and mixtures thereof, such that the unpolymerized or relatively unpolymerized organosilicon compounds are neutralized to a proportion of 1/1000 to 99/100 and preferably from 1/100 to 8/10.

U.S. Patent No. 4,344,763 deals with a cosmetic composition comprising:

- an aminoalkylalkoxysilane, which is a monomer;
- a titante ester, which is a catalyst;
- a solvent which is preferably mainly isopropanol.

More specifically, this patent describes a process for setting hair. When the composition comes into contact with the water on the hair, the polymerization process beings (in order to provide hair setting agent). This composition is kept in an anhydrous atmosphere in order to prevent polymerization (col. 4, lines 32-35).

According to the Examiner, patent '763 differs from the present invention by the absence of the neutralizing agent. Furthermore, the present composition does not contain catalyst.

EP Patent 0159628 deals with a composition for strengthening the tensile strength of hair comprising an alkyltrialkyloxysilane and a solvent for said alkyltrialkyloxysilane.

According to the Examiner, patent EP 628 differs from the present invention by the absence of the neutralizing agent.

EP Patent 0464835 is directed to a method for imparting curl retention to hair in which at least one film forming ingredient is applied to the hair. The improvement consists in the use of an organosilicon compound which is a pre-hydrolyzed organofunctional silane, as the film forming ingredient.

According to the Examiner, EP 835 describes the use of protonic acid in order to protonate the aminofunctions carried by the silanes.

The Examiner is of opinion that it would have been obvious to one of ordinary skill in the art at the time of the present invention to employ an appropriate protonic or Lewis acid in the hair setting compositions of US '763 or in the hair-strengthening compositions of EP 628.

Nothing in these three documents however suggests to one of ordinary skill to add a neutralizing agent to the setting composition in order to obtain a stable cosmetic composition, in particular for treating the hair, which is essentially aqueous and which makes it possible to obtain a sufficient and remaining cosmetic effect in rinse-out or leave-in mode. Indeed, the neutralizing agent described in EP 835 imparts good curl

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retention, water compatibility and resistance and thus imparts good hold on the hair.

The use of this ingredient would not have solved the technical problem of the skilled

person.

Furthermore, nothing in the cited three documents would have motivated one of ordinary skill in the art to select specifically the sulfuric acid among the protonic acids and the Lewis acids.

In Example 1 of the present application, the applicants demonstrate that sulfuric acid provides an unexpected effect with regard to the quality of the obtained film, which is not disclosed in the three cited documents.

The applicants submit that the subject matter of the presently claimed invention was not obvious in view of the cited documents.

Withdrawal of the Section 103 rejection of claims 1-9 is requested.

Return of an initialed copy of the PTO-1449 Form filed February 22, 2002, pursuant to MPEP § 609, is requested.

The claims are submitted to be in condition for allowance and a Notice to that effect is requested.

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Respectfully submitted,

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